

1) Find the following limits

A. $\lim_{x \rightarrow \infty} \frac{3x^2 - 5}{4x^2 - x + 8} = \lim_{x \rightarrow \infty} \frac{3x^2}{4x^2} = \frac{3}{4}$

B. $\lim_{x \rightarrow -\infty} \frac{3x^2 - 5}{4x^3} = \lim_{x \rightarrow \infty} \frac{3x^2}{4x^3} = 0$

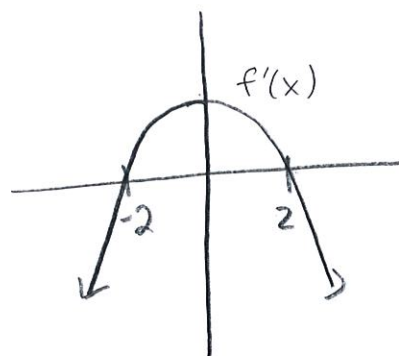
~~2) Does (A) have a horizontal asymptote?~~

3) Given the graph of $f'(x)$ is

A. Where is $f(x)$ increasing?

B. Where does $f(x)$ have a relative min?

C. Where is $f(x)$ concave down?



A. $(-2, 2)$ ($f'(x) > 0$)

B. $x = -2$ ($f'(x)$ neg to pos)

C. $(0, \infty)$ ($f'(x)$ decreasing)

